	Application No.	Applicant(s)
Notice of Allowability	09/714,207	STERN ET AL.
	Examiner	Art Unit	
	Quoc A. Tran	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>Applicant's Reponse to Non-Final filed 01/22/2008 and Phone interview on 04/11/2008</u>.

2. ☒ The allowed claim(s) is/are <u>1, 7-18, 26-34, 19, 22, 35-38, and 23-25 (renumbering as 1-31 respectively)</u>.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date <u>08/25/2006</u>

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date <u>04/11/2008</u> .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Doug Hutton/
Supervisory Patent Examiner
Technology Center 2100

DETAILED ACTION

In response to Applicant's Response Non-Final Office Action filed 01/22/2008, and telephone interview on 04/11/2008, the examiner's amendment was authorized by attorney of record Martin Moynihan Attorney for Applicants, Registration No. 40,338. Claims 1, 12-13, 19, and 22-25 are currently amended. Claims 2-6 and 20-21 are canceled. Claims 8, 12-18 and 26-38 were previously presented. Claims 9-11 were original. Claims 1, 19, and 23-25 are independent claims; filed 11/17/2000, benefit priority dated of *06/16/2000* from No. 60/211,976.

Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

EXAMINER'S AMENDMENT

The application has been amended as follows:

1. (*Currently Amended*)   A method for automatically publishing data in a final publication format, wherein the data is in the form of a newspaper having an original, existing format including a plurality of pages, each page having a predetermined layout comprising a plurality of independently standing data blocks, each block having an internal structure, the method comprising:

obtaining a scanned representation of said newspaper, said

representation preserving said layout,

from said representation automatically analyzing the newspaper to

decompose the predetermined layout of each page of the newspaper in the

original, existing format into said plurality of blocks, each block representing an

object; said analyzing furthermore applying knowledge of newspaper structure

and identifying at least one logical relationship between said blocks;

converting each object to an internal publication format, said internal

publication format identifying and preserving said internal structure of said blocks

within said objects, said internal publication format furthermore preserving said

layout as a relationship between said objects; said internal publication format

furthermore preserving said logical relationship; and said internal publication

format comprising a mark-up language to indicate said objects and features of

said internal structure wherein said mark-up language is XML; and

rendering said internal publication format to incorporate said objects, said

layout and respective internal structures and said logical relationship in the final

publication format; thereby forming said newspaper into said final publication

format from objects in said internal publication format by rendering.

2.-6. (Canceled)

7. (Original) The method of claim 1, wherein said layout is decomposed by

classifying each object according to a category selected from the group

consisting of an article, an advertisement, a picture not otherwise associated with said article or said advertisement, and general data.

8. (Previously Presented) The method of claim 1, wherein said object is constructed in said converting from content and at least one attribute of said object in said layout.

9. (Original) The method of claim 8, wherein said object is composed of a plurality of primitives, each primitive containing a portion of content and an attribute.

10. (Original) The method of claim 9, wherein each attribute is stored in an XML tag.

11. (Original) The method of claim 10, wherein at least one attribute describes a relationship between said primitives of said object.

12. (*Currently Amended*) The method of claim 1, wherein said rendering said internal publication format is performed according to a ~~type of~~ <u>specific</u> hardware device for displaying the final publication format.

13. (*Currently Amended*) The method of claim 12, wherein said rendering said internal publication format is performed only after a query from [[a]] the specific hardware device is received.

14. (Previously Presented) The method of claim 1, wherein said analyzing the data to decompose said layout further comprises:

      preparing a list of text and/or graphic elements for each object;

      determining properties of each element; and

      recognizing structural layout properties of the data in an original format.

15. (Previously Presented) The method of claim 14, wherein said determining properties of each element includes determining visibility and overlap characteristics for each graphic element.

16. (Previously Presented) The method of claim 14, wherein said determining properties of each element includes determining a special characteristic for each text element.

17. (Previously Presented) The method of claim 14, wherein the data is in a form of a newspaper, and said analyzing the data to decompose said layout further comprises: determining each text segment for each object; and building a text block from a plurality of aligned text segments.

18. (Previously Presented) The method of claim 17, wherein said analyzing the data to decompose said layout further comprises: creating a graphic block from a plurality of graphic elements; creating a hierarchy of graphic blocks; and distributing text blocks in said hierarchy of graphic blocks.

19. *(Currently Amended)* An electronic system tangibly embodied in a computer for automatically publishing received data of a pre-existing newspaper, the newspaper in a computerized format, the system comprising:

(a) at least one source of newspaper data, said source preserving an original, structure of the newspaper, the computerized format comprising a plurality of pages, each page having a predetermined layout comprising a plurality of independently standing data blocks, each block having an internal structure;

(b) a mark-up language distiller module implemented on a processor, for converting the newspaper from said original format to a mark-up language format, wherein said mark-up language distiller module is configured to apply knowledge of newspaper structure and automatically analyzes the newspaper data in said original, existing digital format to (1) decompose the newspaper data into said plurality of blocks, each block with said internal structure representing an independent data object, each object having content and at least one attribute of the data, such that each object is converted to said mark-up language format, said markup language distiller module further analyzing and preserving said structure; and (2) identify at least one logical relationship between blocks, said

markup language distiller module further analyzing and preserving said logical

relationship, wherein said mark-up language format is XML; and

     (c) a publisher server for rendering the data from said mark-up language

format to a final publication format, said final publication format being a rendered

electronic format for display incorporating, as objects, said blocks with said

internal structure, and further defining interrelationships between said objects as

part of said electronic format; said publication server thereby forming said

newspaper into said final publication format from objects in said internal

publication format by rendering.

20.-21. (Canceled)

22. (*Currently Amended*) The system of claim [[21]] 19, further comprising:

     (d) a repository for storing said plurality of objects, wherein each object

features data in said XML format and an image of the data.

23. (*Currently Amended*) A method for automatically publishing data of a

preexisting document in a final publication format, wherein the data is received

in an original, existing format comprising a plurality of pages, each page having a

predetermined layout comprising a plurality of independently standing data

blocks, each block having an internal structure the method comprising:

     obtaining a representation of said preexisting document , said

representation preserving said layout;

from said representation, automatically analyzing the preexisting

document to decompose the data received in the original, existing format into a

plurality of objects, each object corresponding to one of said blocks; said

analyzing furthermore applying knowledge of document structure and identifying

at least one logical relationship between said blocks;

preparing a list of text and/or graphic elements for each object;

determining properties of each element, including determining visibility

and overlap characteristics for each graphic element within said object;

recognizing structural layout properties of the data in an original format;

converting each object to an internal publication format; said internal publication

format furthermore preserving said logical relationship; and said internal

publication format comprising a mark-up language to indicate said objects and

features of said internal structure, wherein said mark-up language format is XML

and

rendering said internal publication format in the final publication format,

said final publication format presenting said blocks as said independently

standing objects incorporating said internal structure and said layout and said

logical relationship; thereby forming said newspaper into said final publication

format from objects in said internal publication format by rendering.

24. (*Currently Amended*) A method for automatically publishing received data in

a final publication format, the data having an original, existing format comprising

a plurality of pages, each page having a predetermined layout comprising a

plurality of independently standing data blocks, the method comprising:

   obtaining a representation of said received data having an original existing

format, said representation preserving said layout;

   from said representation, automatically analyzing the pages to decompose

the pages of the data received in the original, existing format into a plurality of

objects, said objects corresponding to said blocks; said analyzing furthermore

applying knowledge of page structure and identifying at least one logical

relationship between said blocks;

   preparing a list of text and/or graphic elements for each object;

   determining properties of each element, including determining a special

characteristic for each text element;

   recognizing structural layout properties of the data in an original format;

converting each object to an internal publication format; said internal publication

format identifying and preserving said internal structure of said blocks within said

objects, said internal publication format furthermore preserving said layout as a

relationship between said objects; said internal publication format furthermore

preserving said logical relationship; and said internal publication format

comprising a mark-up language to indicate said objects and features of said

internal structure, wherein said mark-up language format is XML, and

   rendering said internal publication format in the final publication format

such as to include said recognized structure in said objects and said logical

relationship and to include said layout; thereby forming said received data into

said final publication format from objects in said internal publication format by rendering.

25. (*Currently Amended*) A method for automatically publishing received data in a final publication format, wherein the data is in the form of a newspaper, the newspaper having an original, existing format comprising a plurality of pages, each page having a predetermined layout comprising a plurality of independently standing data blocks, each block having structural layout properties, the method comprising:

obtaining a representation of said newspaper, said representation preserving said layout;

from said representation, automatically analyzing the newspaper to decompose the data received in the original, existing format into a plurality of objects, said objects corresponding to said independently standing blocks; and

said analyzing furthermore applying knowledge of newspaper structure and identifying at least one logical relationship between said blocks;

preparing a list of text and/or graphic elements for each object;

determining properties of each element;

recognizing said structural layout properties of the data in an original format;

determining each text segment for each object;

building a text block from a plurality of aligned text segments;

converting each object to an internal publication format; said internal publication

format furthermore preserving said logical relationship; and said internal

publication format comprising a mark-up language to indicate said objects and

features of said internal structure, wherein said mark-up language format is XML

and

rendering said internal publication format in the final publication format to

comprise said blocks as objects incorporating said structural layout properties,

and to include said layout and said logical relationship; thereby forming said

newspaper into said final publication format from objects in said internal

publication format by rendering.

26. (Previously Presented) The method of claim 1 wherein said form of a

newspaper comprises at least one property, said property selected from a group

including multiple columns, titles, subtitles, images and image captions.

27. (Previously Presented) The method of claim 1, wherein said blocks

correspond to content items in said newspaper.

28. (Previously Presented) The method of claim 27, wherein said blocks

comprise a part of a column or article in said newspaper.

29. (Previously Presented) The method of claim 28, wherein said block includes

a text portion, such that it is related to the physical layout of said newspaper.

30. (Previously Presented) The method of claim 1, wherein said blocks rendered in said final publication format may be viewed in an order defined by the user.

31. (Previously Presented) The method of claim 1 wherein said data comprises new data and archived data.

32. (Previously Presented) The method of claim 31, wherein said archived data comprises microfilm data.

33. (Previously Presented) The method of claim 32, wherein said analyzing said data further comprises converting said microfilm data into a digital format.

34. (Previously Presented) The method of claim 1, further comprising presenting said final publication format to a user through a Graphic User Interface (GUI).

35. (Previously Presented) The system of claim 19, wherein said at least one source of data comprises a source of new data.

36. (Previously Presented) The system of claim 19, wherein said at least one source of data comprises a source of archived data.

37. (Previously Presented) The system of claim 36, wherein said source of archived data contains microfilm data.

38. (Previously Presented) The system of claim 37, further comprising a

microfilm publisher for converting said microfilm data into said digital format.

Response to Arguments

Applicant's arguments filed 01/22/2008 have been fully considered and

they are persuasive.

It is noted, Claim 3 objected to as being of improper dependent to a

cancelled claim (i.e. claim 2 is currently cancel) has been withdrawn, due to

Applicant's responses to the Non-Final Office Action filed 01/22/2008 and the

current Examiner's Amendment which is set forth herein.

It is noted, Claims 1, 3-4, 7-18, 23-24, and 26-34 rejected under 35

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point

out and distinctly claim the subject matter has been withdrawn, due to Applicant's

responses to the Non-Final Office Action filed 01/22/2008 and the current

Examiner's Amendment which is set forth herein.

It is noted, Claims Claim(s) 19-22, and 35-38 are directed to non-statutory

subject matter rejected under 35 U.S.C. 101, has been withdrawn, due to

Applicant's responses to the Non-Final Office Action filed 01/22/2008 and the

current Examiner's Amendment which is set forth herein.

Allowable Subject Matter

Claims 1, 7-18, 26-34, 19, 22, 35-37, and 23-25 are allowed.

The following is an examiner's statement of reasons for allowance:

Interpreting the claims in light of the specification, Examiner finds the claimed invention is patentably distinct from the prior art of record, Tyan et al. US Patent No. 5,893,127 - filed 11/18/1996. in view of Bobrow et al. US Pub No. 2002/0029232 - filed 06/30/1995, further in view of Alam et al. US006336124B1 filed 07/07/1999, which set forth in the previous rejection mailed on 10/25/2007.

Under the broadest reasonable interpretation of the claimed limitation consistence with the Applicant's Specification, the prior art of record fail to teach all of the Applicant's claimed limitation. In particularly, the claimed invention advantageously provides a finer level of detail that enables the user obtaining a representation of said newspaper (i.e. text and/or graphic elements for each object); recognizing said structural layout properties of the data in an original format; said converting each object to an internal publication format; said internal publication format furthermore preserving said logical relationship; and said internal publication format comprising a mark-up language to indicate said objects and features of said internal structure, wherein said mark-up language format is XML - See claims 1, 19, and 23-25.

The Examiner asserts that the claims overcome the prior art of record when the limitations are read in combination with the respective claimed limitations in their entirety.

The dependent claims, further limiting the independent claims, are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is 571-272-8664. The examiner can normally be reached on Mon through Fri 8AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571)272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

/Quoc A, Tran/
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